January 2, 2004

Summary

On January 2, 2004 at approximately 9:30 a.m. a 38-year-old paper machine crewmember was killed when the cut-off knife for the winder was activated before the crewmember had cleared away from the knife blade.

After the paper sheet broke and wrapped around the drive drums, the victim and the 2 other crewmembers entered the machine to remove the excess paper from the drums and other areas within the winder. The knife blade was moved into the "maintenance" position and the operator then removed the interchangable key. The machine had not been turned off. The key for operation of the knife blade was placed in the pocket of the operator. Later, the operator reinserted the key and started moving the knife blade from the maintenance position to the running position without checking to ensure the machine area was clear. One employee was trapped between the cutoff knife and a drive roll. The victim sustained severe puncture wounds and lacerations.

All employees had received basic lockout/tagout training on the LOTO program. A partial energy control procedure had been developed for the task. The procedure did not address all of the sources of hazardous energy and methods necessary to isolate them. The procedure did require a group LOTO and usage of safety pins on the knife blade to prevent it from moving while an employee was in the hazardous area. Although the procedure had been developed and posted, the crew did not recall being trained on the procedure. Not all of the energy in the area is controled by the single key used to turn off the cut-off knife.

Requirement/Recommendations

- All hazardous energy sources associated with the equipment to be locked out must be addressed in a procedure that clearly and specifically outlines scope, purpose, authorization, rules and techniques. WAC 296-24-11005(4)(b)
- A key that is interchangeable with other equipment in the area cannot be used as a lockout device. WAC 296-24-11005(5)(b)(iii)
- Prior to starting work on machines or equipment that have been locked out or tagged our, the authorized employee shall verify that isolations and deenergization of the machine or equipment have been accomplished. WAC 296-11007(4)
- Each employer shall conduct a periodic inspection to the energy control procedure at east annually to ensure that the procedure and the

requirements of this standard are being followed. WAC 296-24-1105(6)(a)

- The employer shall provide training to ensure that the purpose and function of the energy control program are understood by employees. WAC 296-24-11005(7)
- Whenever there is a change, or a periodic inspect reveals deviations or lack of proficiency retraining must take place. WAC 296-24-11005(7)(c)
- Management must establish, supervise and enforce the safety procedures in a manner that is effective in practice. WAC-296-800-14025